What is Claimed Is:

Claims 1-28. (Canceled)

29. (New) A barrier laminate comprising

a) a paperboard substrate having a first surface and a second surface, the second surface being opposite the first surface,

b) a layer of polyolefin applied directly onto the second surface of the paperboard substrate,

c) a first polyamide layer applied directly on the first surface of the paperboard substrate,

d) a first oxygen barrier layer of EVOH applied directly onto the first polyamide layer,

e) a second polyamide layer applied directly onto the first oxygen barrier layer of EVOH,

f) a first tie layer applied directly on the second polyamide layer,

g) a second oxygen barrier layer selected from the group consisting of EVOH, polyvinyl alcohols, polyamides, polyesters, polyethylene terphthalates, polyolefins, cyclic olefin copolymers, polycarbonates, liquid crystalline polymers and blends thereof and blends of any of the foregoing group members with at least one member selected from the group consisting of desiccants, molecular sieves and cyclodextrins applied directly on said first tie layer,

h) a second tie layer applied directly on said second oxygen barrier layer, and

i) a polyolefin layer applied onto said second tie layer as the innermost and product contact layer.

30. (New) A barrier laminate according to claim 29 wherein said polyolefin layer applied onto the second surface of the paperboard substrate is polyethylene.

31. (New) A barrier laminate according to claim 29 wherein said polyolefin applied onto the second tie layer and forming the product contact layer is polyethylene.

32. (New) A barrier laminate according to claim 29 wherein said first and second polyamide layers each comprise a member selected from the group consisting of nylon 6, nylon 66, nylon 10, nylon 6-10, nylon 11, nylon 12, amorphous nylons, MXD-6 and nylon nanocomposites.

33. (New) A barrier laminate according to claim 29 wherein the second oxygen barrier layer is EVOH.

34. (New) A barrier laminate according to claim 29 wherein the tie layers are each an ethylene based copolymer modified with maleic anhydride functional groups.

35. (New) A high oxygen barrier laminate comprising

a) a paperboard substrate having a first surface and a second surface, the second surface being opposite the first surface,

b) a layer of polyolefin applied directly onto the second surface of the paperboard substrate,

c) a first polyamide layer applied directly on the first surface of the paperboard substrate,

d) a first oxygen barrier layer of EVOH applied directly onto the first polyamide layer,

e) a second polyamide layer applied directly onto the first oxygen barrier layer of EVOH,

f) a first tie layer applied directly on the second polyamide layer,

g) a layer of polyolefin applied directly onto said first tie layer,

h) a second tie layer applied directly onto said polyolefin layer,

i) a second oxygen barrier layer selected from the group consisting of EVOH, polyvinyl alcohols, polyamides, polyesters, polyethylene terphthalates, polyolefins, cyclic olefin copolymers, polycarbonates, liquid crystalline polymers and blends thereof and blends of any of the foregoing group members with at least one member selected from the group consisting of desiccants, molecular sieves and cyclodextrins applied directly on said first tie layer,

j) a third tie layer applied directly on said second oxygen barrier layer, and

k) a polyolefin layer applied onto said third tie layer as the innermost and product contact layer.

36. (New) A high oxygen barrier laminate according to claim 35 wherein the second oxygen barrier layer comprises EVOH.

37. (New) A sealed container and a perishable product contained therein, the container being constructed of a laminate according to claim 29, the product being hot filled into the container, said product having been heated to a temperature sufficient to kill essentially all of the micro organisms in the food product, sealing the container and cooling the product within the container to ensure that the product is shelf stable.

38. (New) A sealed container and a perishable product contained therein, the container being constructed of a laminate according to claim 35 the product being hot filled into the container, said product having been heated to a temperature sufficient to kill essentially all of the micro organisms in the food product, sealing the container and cooling the product within the container to ensure that the product is shelf stable.

39. (New) A sealed container and a perishable product contained therein constructed of a laminate according to claim 35 the product being cold filled into the container.

40. (New) A container blank constructed from a laminate according to claim 29.

41. (New) A container blank constructed from a laminate according to claim 35.

42. (New) A container blank constructed from a laminate according to claim 36.

43. (New) A laminated packaging material especially for heat scalable, hot fill, room temperature storage of liquid food products comprising a barrier laminate according to claim 29.

44. (New) A laminated packaging material especially for heat sealable, hot fill, room temperature storage of liquid food products comprising a barrier laminate according to claim 35.

45. (New) A laminated packaging material especially for heat sealable, cold fill, room temperature storage of liquid food products comprising a barrier laminate according to claim 29.

46. (New) A laminated packaging material especially for heat sealable, cold fill, room temperature storage of liquid food products comprising a barrier laminate according to claim 35.

47. (New) A sealed container and a perishable product contained therein constructed of a laminate according to claim 29, the product being cold filled into the container.

48. (New) A container blank constructed from a laminate according to Claim 33.